

UNIT PRICE CATALOG

1014 Catalog Entries
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REPLACEMENT SHEET

Location Factor:
Sales Tax:
Ave Sub Gen'l Conditions:

System	Description	Base Unit Cost
col_sprd_ftg 1	3000 PSI concrete forms, rebar, concr, placing, finish	\$291.00
sprd_ftg 1	3000 PSI concrete Not Req'd (Trench Footing)	\$0.00
2	12" thick x 18" wide; forms, reinf, direct chute	\$10.76
3	12" thick x 24" wide; forms, reinf, direct chute	\$16.04
4	(For Precast Foundations) 12" thick x 24" wide; 3/4" stone bedding	\$2.22
fdn_drain 1	PVC 4" dia; gravel drain bed	\$4.00
2	PVC 6" dia; gravel drain bed	\$5.00
fdn_wall 1	4' high foundation: Poured-8"; bitum/damp; sill plates	\$25.60
2	Poured-10"; bitum/damp; sill plates	\$28.26
3	Poured-10"; brickledge; bitum/damp; sill plates	\$32.04
4	Poured-12"; bitum/damp; sill plates	\$32.60
5	Poured-12"; brickledge; bitum/damp; sill plates	\$36.38
6	Block-8", grouted; bitum/damp; parging; sill plates	\$42.68
7	Block-10", grouted; bitum/damp; parging; sill plates	\$50.44
8	Block-12", grouted; parging; bitum/damp; sill plates	\$58.20
9	Pre-Cast Wall System; 1" Rigid Insul (R-5), furring ribs; sill plates	\$40.63

FIGURE 2a

0.93 MASTER [BASELINE] Resi-Cost™
6.00% Barrien City, MI
0%

Adjusted Unit		Cost Adjustments			
Cost	Unit	Loc Fctr	S Tax	Sub GC	
\$278.75	CY	0.93	3.00%	0%	
\$0.00	LF				
\$10.31	LF	0.93	3.00%	0%	
\$15.36	LF	0.93	3.00%	0%	
\$2.13	LF	0.93	3.00%	0%	
\$3.83	LF	0.93	3.00%	0%	
\$4.79	LF	0.93	3.00%	0%	
\$24.52	LF	0.93	3.00%	0%	
\$27.07	LF	0.93	3.00%	0%	
\$30.69	LF	0.93	3.00%	0%	
\$31.23	LF	0.93	3.00%	0%	
\$34.85	LF	0.93	3.00%	0%	
\$40.88	LF	0.93	3.00%	0%	
\$48.32	LF	0.93	3.00%	0%	
\$55.75	LF	0.93	3.00%	0%	
\$38.91	LF	0.93	3.00%	0%	

REPLACEMENT SHEET

FIGURE 2b

ENERGY MODEL

MASTER [BASELINE] Resti-Cost™



TOTAL FINISHED AREA (TFA): 2,400 SF
TOTAL CONSTRUCTED AREA: 4,764 SF

Berrien City, MI
3 Bedroom; 1 Full; 1 Half Baths

Enter:	State	Residential Energy Code	State Mandate	Comments
MI	Michigan	Michigan Uniform Energy Code Part 10 Rules, less stringent than 1992 MEC	Yes	Prior to June 22, 1977, the state of Michigan had no building energy efficiency requirements. On July 27, 1985, the state adopted ANSI/ASHRAE/IES Standard 90A-1980 statewide. SB 719, signed in early January 1996, repealed the 1995 adoption of the 1993 MEC. The legislation directed the state construction code commission to, by April 1, 1997, provide cost-effective standards and establish a program to provide home buyers with energy rating information. The Michigan Uniform Energy Code Part 10 Rules were adopted March 31, 1999.

Envelope Heat Loss	Area (SF)	R-Value	U Factor	Delta T	Heat Loss (BTUH)
Heat Loss-Basement Walls-ENERGY STAR	1,479	15	0.07	22	2,169
Heat Loss-Basement Floor (or Ground Fir Slab)	1,500	25	0.04	22	1,320
Heat Loss-Walkout Wall	0	0	0.00	67	-
Heat Loss-Walls	1,751	10	0.10	67	11,970
Heat Loss-Walls (Supplemental)	0	0	0.00	67	-
Heat Loss-Windows (low-E) Default (R-3)	345	3	0.33	67	7,705
Heat Loss-Windows Standard Glazing (R-2)	0	2	0.50	67	-
Heat Loss-Windows (low-E) Triple Glaze (R-6)	0	6	0.17	67	-
Heat Loss-Doorwalls	0	3	0.33	67	-
Heat Loss-Doorwalls	0	3	0.33	67	-
Heat Loss-Doors	63	5	0.20	67	844
Heat Loss-Roof SIP (on Timber)	0	0	0.00	67	-
Heat Loss-Roof SIP (on SIP)	0	0	0.00	67	-
Heat Loss-Attic (Uninsulated Roof Rafters)	1,500	22	0.06	67	4,653
Heat Loss-Skylights	0	3	0.33	67	-
Building Envelope Heat Loss					28,661 BTUH

FIGURE 5a

REPLACEMENT SHEET

5	ASHRAE 99% Design Dry Bulb Temp (deg F)
72	Indoor Design Temp (deg F)
67	Delta T

68,097	Total BTUH Demand
1.4	Furnace Sizing Factor
120,000	Furnace Size at 80%
106,000	Meets Energy Star: Furnace Size at 90%
102,000	Furnace Size at 94%
96,000	Furnace Size at 100% (ELECTRIC)

REPLACEMENT SHEET

FIGURE 5b

Envelope Tightness

Select > 2 Tight Stick Built

1.00 ACH (Air Changes / Hour)

Design Occupancy: 4

Infiltration / Ventilation	CFM	ACH	Constant	Volume	Delta T	Heat Loss (BTUH)
Natural Infiltration	545	1.00	1.08	32,700	67	39,436
Mechanical Ventilation w/AAUX	0	1.00	1.08	32,700	18	-
75% AAUX Efficiency	108	Min Target CFM				

Envelope + Infiltration Heat Loss = 68,097 BTUH

Furnace AFUE = 94%

3 <Select Furnace Efficiency

D = Degree Days = 6,235 Berrien City, MI < (per US Weather Service)

T = Temp diff = 67 degrees

V = Fuel value = 1,052 BTUh per cu ft natural gas

V = Fuel value = 91,743 BTUh per Gallon propane

V = Fuel value = 3,413 BTUh per KWH electric

CF1 = 1.36 Correction factor that includes the effects of rated full load efficiency, part load performance, over sizing and energy conservation devices.

CF2 = 0.71 Empirical correction factor for heating effect versus 65 degrees F degrees-days.

E = Annual Energy Consumption =

148,509 cu ft natural gas

1,703 gallons of propane

- KWH of electricity (100% Eff)

Annual Heating Cost = \$1,351.43 NGAS

Annual Heating Cost = \$2,666.57 PROPANE

Annual Heating Cost = \$0.00 ELECTRIC

FIGURE 5c REPLACEMENT SHEET

HOME SPECIFIC QUALITY / COST SELECTIONS				MASTER [BASELINE] Rest-Cost™				Final - Cost™	
SUBSYSTEMS AND CONSTRUCTION ASSEMBLY OPTIONS				Benien City, MI				Managed	
© 2002 Home-Cost.com 261 System Selections				TOTAL FINISHED AREA: 2,400 SF 3 Bedroom; 1 Full, 1 Half Baths					
				TOTAL CONSTRUCTED AREA: 4,764 SF					
SYSTEM	SUBSYSTEM	Selection	CONSTRUCTION ASSEMBLY OPTIONS	quan	unit	unit \$	total \$	BASELINE TOTAL	Savings
01 Foundation	011 Standard Foundations								
	011.10	Spread footings (timber columns)	1 Not Used	0	NCOLS	\$64.53	\$0	\$0	\$0
	011.10	Spread footings (ally columns)	2 12" thick-36"x36": forms, rebar, concrete	4	EA	\$92.92	\$372	\$372	\$0
	011.20	Spread footings (foundation walls)	4 12" thick x 24" wide; forms, reinf, dired chule	108	LF	\$15.36	\$1,659	\$1,659	\$0
	011.20	Spread footings (basement walls)	5 12" thick x 24" wide; forms, reinf, dired chule, PVC 6" gravel drainbed	164	LF	\$20.15	\$3,312	\$3,312	\$0
	011.30	Foundation Wall (4' high)	2 Poured-10"; bitumldamp; sill plates	150	LF	\$27.07	\$4,061	\$4,061	\$0
	011.40	Excavation: Foundation Wall Footing	2 4' depth spread fig excav, sand/gravel, backfill	854	SF	\$0.56	\$483	\$483	\$0
	012 Special Foundations	1 No additional special foundations		2,364	SF	\$0.00	\$0	\$0	\$0
	021 Slab on Grade								
	021.00	Ground Floor Slab on Grade	3 Not Used	0	SF	\$0.00	\$0	\$0	\$0
02 Substructure	021.00	Garage Floor Slab on Grade	2 5" slab w/4" gravel base; 6 mil vap; expan matf, W1.4/W1.4; steel trowe	864	SF	\$3.11	\$2,690	\$2,690	\$0
	021.00	Basement Slab on Grade	3 4" slab w/4" gravel base; 6 mil vap; expan matf, W1.4/W1.4; steel trowe	1,500	SF	\$2.82	\$4,224	\$4,224	\$0
	021.00	Crawlspace Floor	1 Not Used	0	SF	\$0.00	\$0	\$0	\$0
	021.10	Ground Floor Slab Insulation	1 Not Used	0	SF	\$0.00	\$0	\$0	\$0
	021.10	Basement Slab Insulation	1 Not Used	0	SF	\$0.00	\$0	\$0	\$0
	022 Excavation: Basement / Crawl	3 Walkout Sand & gravel excav, backfill, compaction 8" lifts; rough grade		500	CY	\$6.11	\$3,057	\$3,057	\$0
	022.00	Off Site Trucking	1 Assumes off-site hauling NOT required (Assumes on site placement of :	0	CY	\$0.00	\$0	\$0	\$0
	023 Basement Walls	2 Poured-10"; bitumldamp; sill plates		1,101	BWA	\$7.11	\$7,823	\$7,823	\$0
	023.00	Exposed Basement Wall Framing	1 Not Used	0	BWA	\$0.00	\$0	\$0	\$0
	023.10	Basement Wall Insulation	4 3" rigid-25 PSI Compressive (R-15) ENERGY STAR COMPLIANT	1,101	BWA	\$1.39	\$1,528	\$1,528	\$0

REPLACEMENT SHEET

FIGURE 6a

HOME SPECIFIC QUALITY / COST SELECTIONS				MASTER [BASELINE] Resi-Cost™				Resi-Cost™	
SUBSYSTEMS AND CONSTRUCTION ASSEMBLY OPTIONS				Bentley City, MI				Managed	
© 2002 Home-Cost.com 261 System Selections				TOTAL FINISHED AREA: 2,400 SF 3 Bedroom, 1 Full, 1 Half Baths					
				TOTAL CONSTRUCTED AREA: 4,764 SF					
SYSTEM	SUBSYSTEM	Selection	CONSTRUCTION ASSEMBLY OPTIONS	quan	unit	unit \$	total \$	BASELINE TOTAL	Savings
01 Foundation	011 Standard Foundations	011.10 Spread footings (timber columns)	1 Not Used	0	NCOLS	\$64.53	\$0	\$0	\$0
		011.10 Spread footings (ally columns)	2 12" thick-36"x36"; forms, rebar, concrete	4	EA	\$92.92	\$372	\$372	\$0
		011.20 Spread footings (foundation walls)	4 12" thick x 24" wide; forms, reinf, direct chute	108	LF	\$15.36	\$1,659	\$1,659	\$0
		011.20 Spread footings (basement walls)	5 12" thick x 24" wide; forms, reinf, direct chute, PVC 6" gravel drainbed	164	LF	\$20.15	\$3,312	\$3,312	\$0
		011.30 Foundation Wall (4' high)	2 Poured-10"; bitumidamp; sill plates	108	LF	\$27.07	\$2,924	\$4,061 (\$1,137)	\$0
		011.40 Excavation: Foundation Wall Footing	2 4' depth spread fig excav, sand/gravel; backfill	864	SF	\$0.56	\$483	\$483	\$0
		012 Special Foundations	1 No additional special foundations	2,364	SF	\$0.00	\$0	\$0	\$0
		021 Slab on Grade	3 Not Used	0	SF	\$0.00	\$0	\$0	\$0
		021.00 Ground Floor Slab on Grade	2 5" slab w/4" gravel base; 6 mil vap; expan mat't; W1.4/W1.4; steel trowe	864	SF	\$3.11	\$2,690	\$2,690	\$0
		021.00 Basement Slab on Grade	3 4" slab w/4" gravel base; 6 mil vap; expan mat't; W1.4/W1.4; steel trowe	1,500	SF	\$2.82	\$4,224	\$4,224	\$0
02 Substructure	021.00 Crawlspace Floor	021.10 Ground Floor Slab Insulation	1 Not Used	0	SF	\$0.00	\$0	\$0	\$0
		021.10 Basement Slab Insulation	1 Not Used	0	SF	\$0.00	\$0	\$0	\$0
		022 Excavation: Basement / Crawl	3 <ERROR> Must Select '1' or '2'-Full Basement Option	500	CY	<ERROR>	#VALUE!	\$3,057	#VALUE!
		022.00 Off Site Trucking	1 Assumes off-site hauling NOT required (Assumes on site placement of f	0	CY	\$0.00	\$0	\$0	\$0
		023 Basement Walls	2 Poured-10"; bitumidamp; sill plates	1,479	BWA	\$7.11	\$10,509	\$7,823	\$2,686
		023.00 Exposed Basement Wall Framing	1 Not Used	0	BWA	\$0.00	\$0	\$0	\$0
		023.10 Basement Wall Insulation	4 3" rigid-25 PSI Compressive (R-15) ENERGY STAR COMPLIANT	1,479	BWA	\$1.39	\$2,053	\$1,528	\$525

Alternate Selections illustrating self documenting line item changes to component costs and Self-Correcting feature (Line 022 Basement Excavation) wherein "ERROR" was triggered when "Walkout Basement" was deselected in '40' Design Characteristics, requiring selection of Full Basement excavation options.

FIGURE 6b

REPLACEMENT SHEET

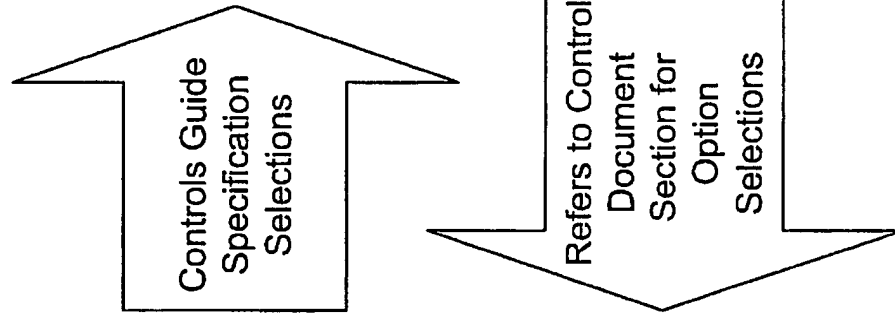
**Residential Cost Estimation
Construction Summary
“Component Options”**

- **Control Document** that provides outline construction descriptions of the building systems selected by the Owner.
- **Serves a similar purpose as site and engineering drawings would provide** in that scope requirements are called out for site, structural, mechanical, electrical and plumbing systems.
- Controls which material options are to be selected in cases where options exist in the guide specification sections.

**Guide Specifications
CSI MASTERFORMAT
Divisions 1-16**

**Detailed Guide Specifications including all
16 CSI Divisions**

Division 1 – General requirements
Division 2 – Site Construction
Division 3 – Concrete
Division 4 – Masonry
Division 5 – Metals
Division 6 – Wood and Plastics
Division 7 – Thermal and Moisture Protection
Division 8 – Doors and Windows
Division 9 – Finishes
Division 10 – Specialties
Division 11 – Equipment
Division 12 – Furnishings
Division 13 – Special Construction
Division 14 – Conveying Systems
Division 15 – Mechanical
Division 16 - Electrical



REPLACEMENT SHEET

FIGURE 7